



*Current and Future on Activities on
Space Weather Education and Outreach in Europe*

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ESTW 2002 project Space Weather and Europe SWE (2002 - 2003)



EU/ESTW 2002 flyer and
Zeiss-Grossplanetarium Berlin



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... Welcome VIPs, invites people, show northern lights but also more



ESA



EU Commission



DLR

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Space Weather Forum: 90 minutes space weather talk show





life in the web ...
see under: www.www-greifswald.de



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*High Light with Space Weather Life:
Real Time Report with Astronauts on ISS*

Frank de Winne and Sergei Zolentsov

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*Space Weather exhibition
and
further exhibitions, s/c models from ESA, DLR, MPAe, MPE ...
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Further advertisement: space weather poster / Weltraumwetter Poster



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First European Space Weather Planetarium Show




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Let us „hear and see“ space weather in real time:
cosmic ray spark chamber



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First Space Weather CD-ROM



Three languages
- English,
- French
- German



Interactive and
Science Museum Edition

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MANY
THANKS
TO:




Additional Space Weather (PR) Events during ESTW 2002 in ...



Finland, Germany,
Italy, Norway,
Poland, Portugal,
Slovakia

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Advertisement of ESTW/SWE products, part I

Advertisements in: SWEN, new Space Weather online journal, SolarNews, AGU newsletters ...

VERY GOOD RESPONSE: world-wide scientists and radio amateurs and British teachers ...
LESS GOOD RESPONSE: industry staffs

- 1) CD-ROM: world-wide distribution of about 23000 CD-ROM, about 750 to individual persons (Finland: educational material for high schools !)
- 2) Space Weather exhibition: travelling exhibition => Hannover, Bonn, Peenemünde (German, English and Polish text)
- 3) Space Weather poster: English and German edition
- 4) Space Weather Planetarium show: available on request (Nehru planetarium India ?) - manuskript (german speaking text), video, slides and music
- 5) Cosmic ray spark chamber: construction material available

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Advertisement of ESTW/SWE products, part II

Further advertisements:

- a) contact
 - national popular science and public journals,
 - book editors / telescope stores,
 - planetarium /science museums
 - and mention the products
- b) contact
 - the different industry branches !
- c) all products are available on request (free of charge for scientists, others: self-cost prizes)

List of requests, emails contacts directly to SME 1A

marion.jenrich@t-online.de
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Advertisement of ESTW/SWE products, part III

Details of advertisements:

- a) free of charge for scientists, teachers ...
- b) self cost price basis: CD-ROM, poster, space weather exhibition (conferences...)
- c) Planetarium show and spark chamber: low prices and negotiations
- d) rising public awareness: public campaign + detailed contacts to people in near future ...

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Additional nearby / future education and outreach activities, part I

- 1) Proposal: European Space Weather Week (ESWW) and European Science Week (ESW) 2005

ESWW details?

ESW proposal is nearly ready for submission in 2004 - additional partners (?):
schools and how they will be involved + institutes/science museums/ planetarium,
also in new EU member states?

- 2) Needs for young people:
 - education at university level: not only space weather lectures / courses
but also part of environment study (physics => astrophysics => space weather physicist)
 - education at industry level: a new skilled profession (?) - service/operation
orientated skilled space weather worker
- 3) Industry: space weather products fair ? (like space industry fair...)

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Additional nearby / future education and outreach activities, part II

- 4) Fun with space weather: aurora tourism until organised from Swedish and Finnish partners and soon from German SME IA and travel agency in Greifswald (see flyers)
- 5) Lesson from several years of space weather activities and especially the last week space weather storm



We need an European access to co-ordinate space weather outreach activities for the European public !

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